ABSTRACT OF THE INVENTION

A system for determining anesthetic state of a subject includes a brain monitor configured to measure at least one parameter of brain activity of the subject and to provide at least one brain monitor output signal indicative of the measured at least one parameter, a stimulator configured to apply a non-surgical stimulus perturbation to the subject and to provide at least one stimulus output signal indicative of timing and intensity of non-surgical stimuli applied to the subject, an analyzer coupled to the brain monitor and the stimulator and configured to receive the at least one brain monitor output signal and the at least one stimulus output signal, to determine a stimulus difference between the non-surgical stimulus intensity in the absence of the perturbation and in the presence of the perturbation, to determine a monitor difference between the a first value of the at least one parameter in the absence of the perturbation and a second value of the at least one parameter in the presence of the perturbation, to make a comparison of the stimulus difference and the monitor difference, and to provide an indication of the comparison, and a display coupled to the analyzer and configured to receive the indication of the comparison, and in response to receiving the indication of the comparison to provide at least one of an audible sound and a visual image indicative of the indication of the comparison.

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